RAYON . .
BY THE MILE

. . a continuous process aided by New Departure Ball Bearings

● The lowly silk worm has become old-fashioned indeed. Now, from liquid Rayon, finished thread is manufactured and wound in one continuous process—ready for the textile mill.

But the 100,000 reels and spindles of this great plant could not operate continuously without the friction-reducing, wear-avoiding qualities of the New Departure self-enclosed and lubricated ball bearings at more than 300,000 points. In fact, they make such a project commercially possible—simplify design, accurately locate rotating parts, eliminate periodic oiling and definitely reduce costs.

New Departure Forged Steel Ball Bearings are literally the *life* of any machine. Nothing rolls like a ball.

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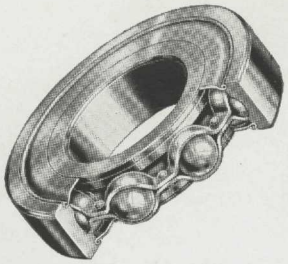
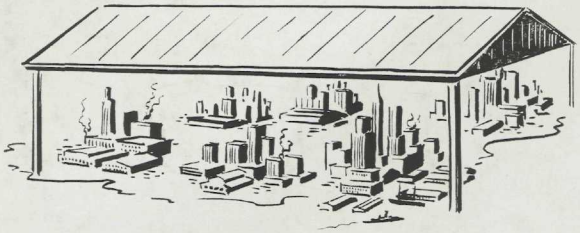


This self-enclosed ball bearing is only one of numerous "new departures," the result of New Departure's well known creative engineering. Engineering students should be interested in booklet "Ideas by New Departure Engineers," for the practical use of the machine builder. New Departure, Division of General Motors, Bristol, Connecticut.

New Departure

BALL BEARINGS FOR DEFENSE

G-E Campus News

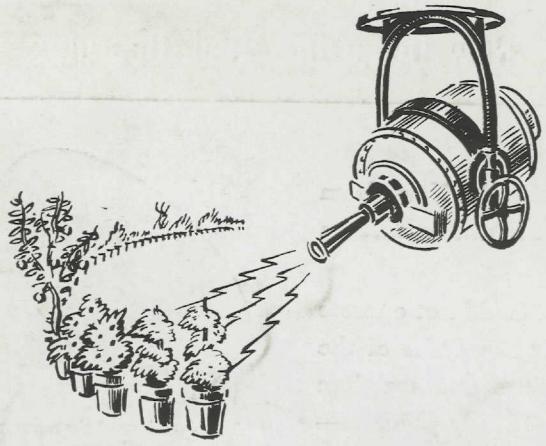


UNDER ONE ROOF

THE General Electric Company has a leased-wire communication system which functions as smoothly as if all G-E branches were housed in a single building.

During the year 1941, a total of 3796 miles was added to the leased-wire communication system to help speed the handling of contracts. A network of 11,565 miles is now available for telephone and teletype messages.

The telephone network covers 5630 miles and serves 17 key industrial cities in the East and Middle West. It contains 37 individual wires, many of which can be interconnected for greater flexibility and coverage. The teletype network comprises 4822 miles of full-time circuits and 1113 miles of part-time circuits. Thirty-one cities are served directly, and many others are served indirectly.



VOLTS AND VITAMINS

THE General Electric industrial X-ray laboratory recently moved a large number of apple and other fruit trees, berry bushes, and tomato and string bean seeds into the confines of its workrooms.

There, under an X-ray machine, these various specimens of flora were bombarded with 1,000,000-volt X rays. They were then returned to the New York State Experiment Station at Geneva for planting and subsequent observation of the effect of the X rays upon the color, size, flavor, quality, resistance to disease, and other characteristics of the fruit and vegetables.

Variations and mutations are to be expected when living plant cells are subjected to bombardment with X rays. Under forced germination, effects of the 1,000,000-volt treatment on seeds may be observed within a few days, but, for the young trees and berry bushes, the full effect will not be known for at least five years.

LE DERNIER CRI

THE General Electric Company's construction of the first large electric plant in the Belgian Congo was stalled by the lack of dowel pins, the only items missing from an inventory of hundreds of parts. The whole camp was searched, natives were questioned, but not a single dowel pin was found.

With a 90-day deadline, replacements were out of the question, so, with makeshift materials, tools, and help, new dowel pins were fashioned. The job was finished on schedule.

Months afterwards a visitor to a half-savage tribe in the Belgian Congo found men and women alike wearing a new type of nose ornament. Thrust through the cartilage of the nose, gleaming and twinkling in the African sunlight, the missing dowel pins were the pride of the natives.

GENERAL ELECTRIC

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